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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,370	12/12/2003	John Frederick Ackerman	130013/11921 (21635-0116)	1818
31450	7590	09/19/2005	EXAMINER	
MCNEES WALLACE & NURICK LLC 100 PINE STREET P.O. BOX 1166 HARRISBURG, PA 17108-1166			BAREFORD, KATHERINE A	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/735,370

Applicant(s)

ACKERMAN ET AL.

Examiner

Katherine A. Bareford

Art Unit

1762

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 September 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-7, 9-11 and 13-17.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because: (1) As to the 35 USC 102(b) rejection using Subramanian (claims 13-17), the Examiner has reviewed applicant's arguments, however, the rejection is maintained. As to the use of a "precursor" by Subramanian, in claim 13, all that is required is that the cerium oxide be on the surface at some point. There is no limitation that a later reaction cannot occur. Thus, even if cerium oxide is on the surface and later converted to another material, it still reads on the application of claim 13. As to the use of cerium in the +4 oxidation state, the Examiner has noted that Subramanian describes the material as CzO_w , where C can be Ce, with no limits on z and w. The Examiner has taken the position that this would provide that all possible numbers for z and w are present, which includes z as 1 and w as 2, thus providing the +4 oxidation state. Applicant argues that this does not meet the requirements of MPEP 2131 since the identical invention is not shown. However, the Examiner notes MPEP 2131.02, which provides a discussion as to how a generic chemical formula will anticipate a claimed species covered by the formula when the species can be at once envisaged from the formula. This would be the case here, as CeO_2 is the basic formula for cerium oxide that would be immediately envisaged when a formula encompassing it is provided. As to the argument that the statements of what is missing from Subramanian in the rejection of claims 1-7, 9 and 11 somehow indicates that claim 13 is not taught by Subramanian the Examiner completely disagrees. As discussed in the Final Rejection, all features actually required by claim 13 are taught by Subramanian. As to claims 1-7, 9 and 11, what Subramanian does not teach is the mechanism of applying a non-cerium oxide precursor and then heating it to get cerium oxide in a +4 oxidation state as claimed (see page 6 of the Final Rejection). This feature is not required by claim 13. (2) As to the rejection of claims 1-7, 9 and 11, the Examiner has reviewed applicant's arguments, however, the rejection is maintained. As to the +4 oxidation state, the Examiner maintains that Subramanian teaches these features as discussed in (1) above. As to the combination of Subramanian and Ueda, the Examiner maintains the obviousness of this combination for the reasons discussed in the Final Rejection. Applicant has taken the position that Ueda teaches that the Ce is 5 to 25 parts by weight of the formed cerium oxide, thus leading to a cerium oxide that does not encompass CeO_2 . The Examiner has reviewed Ueda, however, this is not the case. Ueda teaches a process where an abrasive particle is made where particle comprises 100 parts by weight of a "metal oxide" (aluminum oxide or silicon oxide) and also 5-25 parts by weight of cerium oxide (see column 2, lines 35-40). Throughout the patent, when referring to the "metal oxide" Ueda means the aluminum/silicon oxide component of the multipart abrasive particle to be formed. Thus, in column 3, when referring to cerium oxide in terms of Ce as 5 to 25 parts by weight of the metal oxide, Ueda means that the mixed particle contains 5-25 parts cerium oxide to 100 parts aluminum/silicon oxide. This is also clearly seen in the examples, See column 6, lines 1-10 and 40-50 for example. Furthermore, since Ueda teaches a simple method of forming cerium oxide from calcining, for example, ammonium cerium sulfate, it is clear that this would inherently provide CeO_2 (see column 4, lines 20-30). (3) As to the rejection of claim 10, the Examiner has reviewed applicant's arguments, however the rejection is maintained. Applicant argues that this claim is allowable for the reasons of parent claim 9. The rejection is maintained as the rejection of claim 9 is also maintained (see the discussion in (2) above).

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Kath BRF
KATHERINE BAREFORD
 PRIMARY EXAMINER